

What is claimed is:

10990318-1

1        1.        A method for allowing a user to proactively determine health status of  
2        network objects and group views by dynamically manipulating a user interface of a  
3        windows-based managed network environment, comprising:

4  
5                defining one or more health characteristics for each network object of a  
6        plurality of network objects grouped into one or more group views of the managed  
7        network environment, wherein the one or more health characteristics of each  
8        network object define a health status of the network object and wherein each  
9        health characteristic of the one or more health characteristics has a health status  
10       indicator representative of the health status of the health characteristic;

11  
12               monitoring the one or more health characteristics for each network object in  
13       order to determine the health status of each health characteristic of the one or  
14       more health characteristics for each network object;

15  
16               storing the one or more health characteristics for each network object of the  
17       plurality of network objects in a health characteristic configuration file of a group  
18       view of the plurality of group views to which the network object belongs;

19  
20               displaying a plurality of group view containers within the user interface with  
21       each group view container corresponding to a group view of a plurality of group  
22       views, each group view of the plurality of group views representative of a grouping  
23       of network objects of the plurality of network objects and containing a plurality of  
24       group view attributes, defined by a plurality of attribute values in a group view

1 attribute list stored in an attribute configuration file of the group view, that define  
2 the grouping of network components of the group view, wherein a user can  
3 dynamically change one or more group views of the plurality of group views by  
4 changing one or more group view attributes of the plurality of group view attributes,  
5 wherein each group view container of the plurality of group view containers has a  
6 group view health status indicator representative of the overall health status of the  
7 group view represented by the group view container as determined by the health  
8 status of each network object of the one or more network objects of the group view,  
9 wherein each network object within a group view has a network object health status  
10 indicator representative of the health status of the network object as determined by  
11 the one or more health characteristics of the network object;

12  
13 identifying each group view of the plurality of group views that has a poor  
14 health status as indicated by the group view health status indicator of each group  
15 view container of the plurality of group view containers displayed;

16  
17 for each group view of the plurality of group views identified as having a  
18 poor health status, selecting the group view to display the grouping of network  
19 objects of the group view within the user interface;

20  
21 identifying each network object of the selected group view that has a poor  
22 health status as indicated by the network object health status indicator of each  
23 network object;

1 for each network object of the selected group view identified as having a  
2 poor health status, selecting the network object to display a grouping of the one or  
3 more health characteristics of the network object;

4  
5 identifying each health characteristic of the one or more health  
6 characteristics of the network object that has a poor health status as indicated by  
7 the health status indicator of the health characteristic; and

8  
9 for each health characteristic of the one or more health characteristics  
10 identified as having a poor health status, selecting the health characteristic to  
11 display within the user interface a message indicative of an event that caused the  
12 poor health status of the health characteristic.

13  
14 2. The method of claim 1, wherein determining the health status of each health  
15 characteristic comprises:

16  
17 comparing a performance data of the health characteristic to a  
18 predetermined threshold of the health characteristic; and

19  
20 if the performance data of the health characteristic violates the  
21 predetermined threshold of the health characteristic, causing the health status  
22 indicator of the health characteristic to indicate a poor health condition of the health  
23 characteristic.

1 3. The method of claim 1, wherein the network object is a network device of  
2 the managed network environment.

3  
4 4. The method of claim 1, wherein the network object is a network service of  
5 the managed network environment.

6  
7 5. The method of claim 1, wherein the one or more health indicators may  
8 include disk utilization, memory utilization, network utilization, and processor  
9 utilization.

10  
11 6. The method of claim 1, wherein the health characteristic configuration file of  
12 the group view is a registration file of the group view of the network object.

13  
14 7. The method of claim 1, wherein the attribute configuration file of the group  
15 view is a registration file of the group view of the network object.

16  
17 8. The method of claim 1, wherein the health characteristic configuration file  
18 and the attribute configuration file are contained within a registration file of the  
19 group view of the network object.

20  
21 9. The method of claim 1, wherein the group view health status indicator is a  
22 color of an icon of the group view.

1 10. The method of claim 1, wherein the group view health status indicator is a  
2 shape of an icon of the group view.

3  
4 11. The method of claim 1, wherein the group view health status indicator is an  
5 audible alarm.

6  
7 12. The method of claim 1, wherein the network object health status indicator is  
8 a color of an icon of the network object.

9  
10 13. The method of claim 1, wherein the network object health status indicator is  
11 a shape of an icon of the network object.

12  
13 14. The method of claim 1, wherein the network object health status indicator is  
14 an audible alarm.

15  
16 15. The method of claim 1, wherein the message is stored as a field of the  
17 network object.

18  
19 16. The method of claim 1, wherein the message is stored as a field of the  
20 network object in an alarm browser used in an Internet application.

21  
22 17. The method of claim 1, wherein after selecting the group view to display the  
23 grouping of network objects, further comprising:  
24

1 determining a context sensitive information of the group view of the plurality  
2 of group views, comprising:

3  
4 performing a lookup operation on the registration file for the group  
5 view selected by the user;

6  
7 modifying one or more user interface mechanisms of the user interface to  
8 conform with the context sensitive information of the group view selected by the  
9 user, comprising:

10  
11 displaying only one or more items of the one or more user interface  
12 mechanisms that are contained in the registration file so that the one or more  
13 interface mechanisms conform with the context sensitive information of the group  
14 view selected by the user.

15  
16 18. A method for allowing a user to proactively determine health status of  
17 network objects and group views by dynamically manipulating a user interface of a  
18 windows-based managed network environment, comprising:

19  
20 defining one or more health characteristics for each network object of a  
21 plurality of network objects grouped into one or more group views of the managed  
22 network environment, wherein the one or more health characteristics of each  
23 network object define a health status of the network object and wherein each

1 health characteristic of the one or more health characteristics has a health status  
2 indicator representative of the health status of the health characteristic;

3  
4 monitoring the one or more health characteristics for each network object in  
5 order to determine the health status of each health characteristic of the one or  
6 more health characteristics for each network object;

7  
8 storing the one or more health characteristics for each network object of the  
9 plurality of network objects in a health characteristic configuration file of a group  
10 view of the plurality of group views to which the network object belongs;

11  
12 displaying one or more network objects within the user interface  
13 corresponding to a group view of a plurality of group views defined by a plurality of  
14 attribute values in a group view attribute list stored in an attribute configuration file  
15 wherein a user can dynamically change the group view by changing one or more  
16 group view attributes of the plurality of group view attributes, wherein each network  
17 object within a group view has a network object health status indicator  
18 representative of the health status of the network object as determined by the one  
19 or more health characteristics of the network object;

20  
21 identifying each network object of the one or more network objects of the  
22 group view that has a poor health status as indicated by the network object health  
23 status indicator of each network object;



1 for each network object of the selected group view identified as having a  
2 poor health status, selecting the network object to display a grouping of the one or  
3 more health characteristics of the network object;

4  
5 identifying each health characteristic of the one or more health  
6 characteristics of the network object that has a poor health status as indicated by  
7 the health status indicator of the health characteristic; and

8  
9 for each health characteristic of the one or more health characteristics  
10 identified as having a poor health status, selecting the health characteristic to  
11 display within the user interface a message indicative of an event that caused the  
12 poor health status of the health characteristic.

13  
14 19. The method of claim 18, wherein determining the health status of each  
15 health characteristic comprises:

16  
17 comparing a performance data of the health characteristic to a  
18 predetermined threshold of the health characteristic; and

19  
20 if the performance data of the health characteristic violates the  
21 predetermined threshold of the health characteristic, causing the health status  
22 indicator of the health characteristic to indicate a poor health condition of the health  
23 characteristic.

1        20.    The method of claim 18, further comprising:

2  
3            determining a context sensitive information of the group view of the plurality  
4        of group views, comprising:

5  
6            performing a lookup operation on the registration file for the group  
7        view selected by the user;

8  
9            modifying one or more user interface mechanisms of the user interface to  
10       conform with the context sensitive information of the group view selected by the  
11       user, comprising:

12  
13           displaying only one or more items of the one or more user interface  
14       mechanisms that are contained in the registration file so that the one or more  
15       interface mechanisms conform with the context sensitive information of the group  
16       view selected by the user.

17  
18       21.    The method of claim 18, wherein the health characteristic configuration file  
19       and the attribute configuration file are contained within a registration file of the  
20       group view of the network object.

21  
22       22.    The method of claim 18, wherein the message is stored as a field of the  
23       network object in an alarm browser used in an Internet application.